

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An access method for a multi-layer holographic recording medium including a multi-layer holographic recording layer formed by laminating a multitude of holographic recording layers in which data pages formed by two-dimensionally arranging a plurality of data blocks for recording data as interference fringes of a common reference beam on an optical path extending in the laminated holographic recording layers and a respective one of a plurality of object beams having different incident angles to respective holographic recording layers are angle-multiplex-recorded in recording areas on a line extending the optical path of the common reference beam at respective holographic recording layers of a multi-layer holographic recording layer formed by laminating a multitude of said holographic recording layers, layers, and the data pages are shift-multiplex-recorded over an entire area in the respective holographic recording layers, the access method for the multi-layer holographic recording medium comprising a process of impinging a laser beam for reproduction on the multi-layer holographic recording medium, the laser beam has the same wavelength as that of the reference beam at the time of recording, and the incident angle thereof to the multi-layer holographic recording medium is also the same as that of the reference beams, then diffraction beams are generated in the respective holographic recording layer in the same direction as that of the object beams, accessing the data blocks based on a layer number assigned to each of the holographic recording layers, a number assigned to each of the data pages in which the same number is assigned to the same recording area on the line in each of the holographic recording layers, and a number assigned to each of the data blocks in each of the data pages, pages, and by repeating a process of shifting to the recording area to be read out by rotating the multi-layer holographic recording medium and a process of

receiving the diffraction beams by two-dimensional optical detectors at respective positions each of which is on lines extending the optical axis of the object beams at the time of recording incident on the respective holographic recording layers.

2. (Canceled)

3. (Currently Amended) The access method for a multi-layer holographic recording medium according to claim 1, wherein the number assigned to each of the data blocks is identified by a row number and a column number assigned to each of the data blocks in each of the data pages.

4-5. (Canceled)

6. (Currently Amended) The access method for a multi-layer holographic recording medium according to ~~claim 5, wherein~~ claim 1, wherein the layer number assigned to each of the holographic recording layers is identified by a number assigned to each of two-dimensional optical detectors each of which is provided for a respective one of the holographic recording layers in order to detect the data pages which are angle-multiplex-recorded, and the two-dimensional optical detectors are constituted by an imaging device having the same two-dimensional pixel arrangement as the pixel arrangement of the data pages and the data pages are read out on a row-by-row basis one row at a time by means of the imaging device.

7. (Currently Amended) The access method for a multi-layer holographic recording medium according to claim 1, comprising: a process of simultaneously reading a plurality of the data pages ~~which are angle-multiplex-recorded in the same recording area; and a process of shifting to the recording area to be read out.~~ in each of the holographic recording layers on the optical path of the laser beam by the two-dimensional optical detectors.

8. (Currently Amended) The access method for a multi-layer holographic recording medium according to ~~claim 5,~~ claim 6, comprising: a process of simultaneously

reading a plurality of the data pages ~~which are angle-multiplex recorded in the same recording area; and a process of shifting to the recording area to be read out.~~ in each of the holographic recording layers on the optical path of the laser beam by the two-dimensional optical detectors.

9. (Canceled)

10. (Original) The access method for a multi-layer holographic recording medium according to claim 1, comprising: a process of successively reading a first data page to a last data page in the holographic recording layer; and a process of changing to the holographic recording layer to be read out.

11. (Canceled)

12. (Original) The access method for a multi-layer holographic recording medium according to claim 6, comprising: a process of successively reading a first data page to a last data page in the holographic recording layer; and a process of changing to the holographic recording layer to be read out.

13. (Currently Amended) The access method for a multi-layer holographic recording medium according to ~~claim 2,~~ claim 1, wherein the layer number assigned to each of the holographic recording layers is identified by a number assigned to each of two-dimensional optical detectors each of which is provided for a respective one of the holographic recording layers in order to detect the data pages which are ~~angle-multiplex recorded on the optical path of the laser beam.~~

14. (Currently Amended) The access method for a multi-layer holographic recording medium according to claim 3, wherein the layer number assigned to each of the holographic recording layers is identified by a number assigned to each of two-dimensional optical detectors each of which is provided for a respective one of the holographic recording

layers in order to detect the data pages which are ~~angle-multiplex recorded on the optical path of the laser beam.~~

15-16. (Canceled)

17. (Currently Amended) The access method for a multi-layer holographic recording medium according to claim 3, comprising: a process of simultaneously reading a plurality of the data pages ~~which are angle-multiplex recorded in the same recording area; and a process of shifting to the recording area to be read out.~~ in each of the holographic recording layers on the optical path of the laser beam by the two-dimensional optical detectors.

18-19. (Canceled)

20. (Original) The access method for a multi-layer holographic recording medium according to claim 3, comprising: a process of successively reading a first data page to a last data page in the holographic recording layer; and a process of changing to the holographic recording layer to be read out.